

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: March 1, 2001, 16:09:35 ; Search time 37.5 Seconds

(without alignments)
50.151 Million cell updates/sec

Title: US-09-331-631A-25_COPY_31_85

Perfect score: 315
Sequence: 1 ENPKHNKLCQSCNSERDSYR.....EECEGGEIIPRRPRQHPER 55

Scoring table:
BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 268485 seqs, 34193795 residues

Total number of hits satisfying chosen parameters: 268485

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

A_Geneseq_36:*

1: /SIDSI/gcgdata/geneseq/geneseq/AA1980.DAT:*

2: /SIDSI/gcgdata/geneseq/geneseq/AA1981.DAT:*

3: /SIDSI/gcgdata/geneseq/geneseq/AA1982.DAT:*

4: /SIDSI/gcgdata/geneseq/geneseq/AA1983.DAT:*

5: /SIDSI/gcgdata/geneseq/geneseq/AA1984.DAT:*

6: /SIDSI/gcgdata/geneseq/geneseq/AA1985.DAT:*

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13: /SIDSI/gcgdata/geneseq/geneseq/AA1992.DAT:*

14: /SIDSI/gcgdata/geneseq/geneseq/AA1993.DAT:*

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20: /SIDSI/gcgdata/geneseq/geneseq/AA1999.DAT:*

21: /SIDSI/gcgdata/geneseq/geneseq/AA2000.DAT:*

Pred No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	315	100.0	605	19	W62838
2	303	96.2	605	20	W62838
3	89	28.3	614	18	W22149
4	89	28.3	614	19	W62834
5	89	28.3	626	18	W22150
6	89	28.3	626	20	Y15244
7	89	28.3	626	20	Y25657
8	67	21.3	78	20	Y30426
9	67	21.3	162	20	Y30436
10	67	21.3	181	17	R91711
11	67	21.3	181	20	Y30409
12	64	20.3	78	20	Y30427

13	64	20.3	162	20	Y30437	Mature nematode ex
14	64	20.3	181	17	R91712	Acanth47. Ancylos
15	64	20.3	181	20	Y30410	Nematode extracted
16	62	19.7	115	20	Y59848	Human normal uteru
17	62	19.7	195	20	Y27572	Human secreted pro
18	62	19.7	255	18	W23815	Arabidopsis floral
19	62	19.7	255	19	W69324	Arabidopsis thalia
20	62	19.7	255	19	W43113	CAULIFLOWER gene p
21	62	19.7	255	19	W39135	Arabidopsis floral
22	62	19.7	255	19	W43330	Arabidopsis floral
23	62	19.7	255	21	Y67554	A. thaliana CAL pr
24	62	19.7	255	21	Y78884	A. thaliana caulit
25	62	19.7	451	21	Y93382	Human PRO1557 (DNG
26	62	19.7	462	18	W09876	Arabidopsis violax
27	61	19.4	117	20	Y29116	Amino acid sequenc
28	60	19.0	1462	20	Y01519	A carcinogenesis-i
29	58.5	18.6	406	20	Y49152	Amino acid sequenc
30	58.5	18.6	419	20	Y49243	N-terminal region
31	58.5	18.6	419	20	Y32182	N-terminal choline
32	58	18.4	478	18	W09875	Tobacco violaxanth
33	58	18.4	619	13	R27651	Human calcium chan
34	58	18.4	745	21	R81652	Streptococcus pneu
35	58	18.4	2161	14	R33545	Sequence of the al
36	58	18.4	2161	16	R71001	Human neuronal cal
37	58	18.4	2161	16	R71002	Human neuronal cal
38	58	18.4	2161	19	W63137	Human calcium chan
39	58	18.4	2161	19	W63149	Human calcium chan
40	57.5	18.3	525	19	W62831	Theobroma cacao an
41	57.5	18.3	566	13	R20181	Sequence encoded b
42	57.5	18.3	625	19	W62830	Macadamia integrif
43	57	18.1	84	20	Y30432	Mature nematode ex
44	57	18.1	91	17	R91701	Acanth47. Ancylos
45	57	18.1	91	20	Y30393	Nematode extracted

ALIGNMENTS

RESULT 1

ID W62838 standard. Protein; 605 AA.

AC W62838;

DE 27-OCM-1998 (first entry)

DE Glycine max antimicrobial protein.

KW antimicrobial protein; infestation; control.

OS Glycine max.

PN W09827805-A1.

PD 02-JUL-1998.

PE 22-DEC-1997; 97MO-AU00874.

PR 20-DEC-1996; 96AU-0004275.

RE (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.

RE Bower NL, Goulter KC, Green JL, Manners JM, Marcus JP;

WPI; 1998-377279/32.

Novel anti-microbial protein from e.g. Macadamia integrifolia -

useful for controlling microbial infestations of plants or mammals

Claim 1; Page 63-65; 96pp: English.

The sequence is that of an antimicrobial protein which can

be used to control microbial infestations in plants and mammalian

CC animals.
XX
SQ Sequence 605 AA;

Query Match 100.0%; Score 315; DB 19; Length 605;
Best Local Similarity 100.0%; Pred. No. 2.3e-26;
Matches 55; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ENPKHNKCLQSCNSERDSTRNQACHARNLTKYKECEGEIIPRPRPQHPER 55
:|||||
Db 31 enpkhnkclqscnsersdstrnqacharnltkvekecegeiprprpqhper 85

RESULT 2

Y40999 ID Y40999 standard; protein; 605 AA.
AC Y40999;

DT 06-DEC-1999 (first entry)

DE Soybean beta-conglycinin protein sequence.

KM Peanut; allergen; Ara H 1; IgE; immunoglobulin E; epitope; Ara h 3;
KW allergic reaction; soybean; beta-conglycinin.

OS Glycine max.

PN MO9945961-A1.

PD 16-SEP-1999.

PF 12-MAR-1999; 99WO-US05494.

PR 12-MAR-1998; 98US-0077763.

PR 11-MAR-1999; 99US-0077763.

PA (UYAR-) UNIV ARKANSAS.

PI Burks W, Helm RM, Cockrell G, Bannon GA, Stanley JS, Shin DS;
PI Sampson H, Compadre CM, Huang SK, Maleki SJ, Kopper RA;

XX WPI; 1999-551218/46.

PT Tertiary structure of peanut allergen Ara h 1 for protection of a host
PT animal from allergic reaction -

XX PS Disclosure: fig 33A-B; 193pp; English.

CC The invention provides a tertiary structure for the peanut allergen
CC Ara H 1. The Ara H 1 allergen is found to contain 23 linear IgE-binding
CC epitopes. The invention also provides an isolated recombinant peanut
CC allergen designated Ara h 3 and a nucleotide molecule encoding the peanut
CC allergen Ara h 3. Molecules of the invention are used to protect a host
CC animal from allergic reaction, particularly using a modified allergen
CC which is less reactive with IgE. The invention may also be used to
CC ensure that the allergen is not introduced into genetically modified
CC food. The present sequence represents a soybean beta-conglycinin protein
CC sequence.

SQ Sequence 605 AA;

Query Match 96.2%; Score 303; DB 20; Length 605;
Best Local Similarity 94.5%; Pred. No. 4.4e-25;
Matches 52; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 ENPKHNKCLQSCNSERDSTRNQACHARNLTKYKECEGEIIPRPRPQHPER 55
:|||||
Db 31 knpkhnkclqscnsersdstrnqacharnltkvekecegeiprprpqhper 85

RESULT 3

W22149 ID W22149 standard; protein; 614 AA.
XX

AC W22149;

DT 29-DEC-1997 (first entry)

DE Peanut allergen Ara h1.

KM Peanut; seed storage protein; allergen; allergy; hypersensitivity;
KW vaccine; anaphylactic shock; immunotherapy; therapy;
KW monoclonal antibody; ELISA; analysis; Ara h1.

OS Arachis hypogaea strain Florunner.

FH Key Location/Qualifiers

FT Peptide 1..22 /label= Sig-peptide

FT Protein 23..614 /label= Mat_protein

FT Modified-site 521..523 /note= "N-glycosylation site"

PN MO9724139-A1.

PD 10-JUL-1997.

PF 23-SEP-1996; 96WO-US15222.

PR 04-MAR-1996; 96US-0610424.

PR 29-DEC-1995; 95US-0009455.

PA (UYAR-) UNIV ARKANSAS.

PI Bannon GA, Burks AW, Cockrell G, Helm RM, Stanley JS;

DR WPI; 1997-363453/33.

DR N-PSDB; T76612.

PT Peanut allergens Ara h1 and Ara h1t - used for vaccination and in
PT two-site monoclonal antibody based ELISA

PS Claim 31; Page 169; 354pp; English.

CC This polypeptide comprises major peanut allergen Ara h1 (W22149).
CC Its sequence was deduced from cDNA clone P17 (T76612), isolated
CC from peanut seed cDNA using a primer (see T76616) based on an
CC isolated Ara h1 peptide (see W24206). The sequence shows
CC significant homology with the vicilin family of seed storage
CC proteins of other legumes. The allergen is recognised by serum
CC IgE from a large proportion of individuals with peanut
CC hypersensitivity. Ara h1 and Ara h1t (see W24164) can be used to
CC raise monoclonal antibodies which are used in a specific two-site
CC MAb ELISA for the detection of Ara h1 or Ara h1t (claimed). IgE-
CC binding Ara h1 antigen epitopes (see W24165-87) may be used in
CC vaccines to protect against allergic reactions to peanut allergens,
CC e.g. anaphylactic shock.

SQ Sequence 614 AA;

Query Match 28.3%; Score 89; DB 18; Length 614;
Best Local Similarity 44.1%; Pred. No. 0.049;
Matches 15; Conservative 6; Mismatches 13; Indels 0; Gaps 0;

QY 1 ENPKHNKCLQSCNSERDSTRNQACHARNLTKYKECEGEIIPRPRPQHPER 34
:|||||
Db 33 empcaqrclqscsqgqepddlkqkacearckleyd 66

RESULT 4
W62834

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ID 10-MAR-1997.
XX
XX W62834 standard; peptide; 614 AA.
AC W62834;
XX
XX 27-OCT-1998 (first entry)
DT
XX Arachis hypogaea antimicrobial protein.
DE
XX Arachis hypogaea antimicrobial protein.
XX
XX antimicrobial protein; infestation; control.
XX
XX Arachis hypogaea.
OS
XX W09827805-A1.
FN
XX
XX 02-JUL-1998.
PD
XX
XX 22-DEC-1997; 97WO-AU00874.
PF
XX
XX 20-DEC-1996; 96AU-0004275.
PR
XX
XX (RETR-) COOP RES CENT TROPICAL PLANT PATHOLOGY.
PA
XX
XX Bower NI, Goulter KC, Green JL, Manners JM, Marcus JP;
PI
XX WPI; 1998-377279/32.
DR
XX
XX Novel anti-microbial protein from e.g. Macadamia integrifolia -
PT
XX useful for controlling microbial infestations of plants or mammals
XX
XX Claim 1; Page 55-57; 96pp; English.
PS
XX
XX The sequence is that of an antimicrobial protein which can
CC
XX be used to control microbial infestations in plants and mammalian
CC
XX animals.
CC
XX
XX Sequence 614 AA:
SQ

```

Query Match 28.3%; Score 89; DB 19; Length 614;
 Best Local Similarity 44.1%; Pred. No. 0.049;
 Matches 15; Conservative 6; Mismatches 13; Indels 0; Gaps 0;

OY 1 ENPKHNKCLQSCNERSRYSRNOACHARNCLIKVE 34
 ||| :||||| | : ||| || | :
 Db 33 enpcagrcldqscgqepddlkqkacesrcrkleyd 66

```

RESULT 5
W2150
ID W2150 standard; Protein; 626 AA.
XX
XX W2150;
AC
XX
XX 29-DEC-1997 (first entry)
DT
XX
XX Peanut allergen Ara h1.
DE
XX
XX Peanut; seed storage protein; allergen; allergy; hypersensitivity;
XX
XX vaccine; anaphylactic shock; immunotherapy; therapy;
XX
XX monoclonal antibody; ELISA; analysis; Ara h1.
XX
XX Arachis hypogaea strain Florunner.
OS
XX
XX Key Location/Qualifiers
FH Peptide 1..22
FT /label= Sig_peptide
FT Protein 23..626
FT /label= Mat_protein
FT Modified-site 521..523
FT /note= "N-glycosylation site"
XX
XX W09724139-A1.
XX

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PD 10-JUL-1997.
XX
XX 23-SEP-1996; 96WO-US15222.
PF
XX
XX 04-MAR-1996; 96US-0610424.
PR
XX 29-DEC-1995; 95US-0009455.
XX
XX (UYAR-) UNIV ARKANSAS.
PA
XX
XX Bannon GA, Burks AW, Cockrell G, Helm RM, Stanley JS;
PI
XX WPI; 1997-363453/33.
DR
XX N-PSDB; T76613.
DR
XX
XX Peanut allergens Ara h1 and Ara h1i - used for vaccination and in
PT
XX two-site monoclonal antibody based ELISA
XX
XX Claim 31; Page 172; 354pp; English.
PS
XX
XX This polypeptide comprises major peanut allergen Ara h1 (W22149).
CC
XX Its sequence was deduced from cDNA clone p41b (T76613), isolated
CC
XX from peanut seed cDNA using a primer (see T76616) based on an
CC
XX isolated Ara h1 peptide (see W24206). The sequence shows
CC
XX significant homology with the vicilin family of seed storage
CC
XX proteins of other legumes. The allergen is recognised by serum
CC
XX IgE from a large proportion of individuals with peanut
CC
XX hypersensitivity. Ara h1 and Ara h1i (see W24164) can be used to
CC
XX raise monoclonal antibodies which are used in a specific two-site
CC
XX Mab ELISA for the detection of Ara h1 or Ara h1i (claimed). IgE-
CC
XX binding Ara h1 antigen epitopes (see W24165-87) may be used in
CC
XX e.g. anaphylactic shock.
CC
XX
XX Sequence 626 AA:
SQ

```

Query Match 28.3%; Score 89; DB 18; Length 626;
 Best Local Similarity 44.1%; Pred. No. 0.05;
 Matches 15; Conservative 6; Mismatches 13; Indels 0; Gaps 0;

OY 1 ENPKHNKCLQSCNERSRYSRNOACHARNCLIKVE 34
 ||| :||||| | : ||| || | :
 Db 35 enpcagrcldqscgqepddlkqkacesrcrkleyd 68

```

RESULT 6
Y15244
ID Y15244 standard; Protein; 626 AA.
XX
XX Y15244;
AC
XX
XX 09-NOV-1999 (first entry)
DT
XX
XX Peanut allergen, Ara h 1, amino acid sequence.
DE
XX
XX allergy; immune response; transgenic; allergen; epitope;
XX
XX immunoglobulin E; Ig E; binding site; peanut.
XX
XX Arachis hypogaea.
OS
XX
XX W0938978-A1.
FN
XX
XX 05-AUG-1999.
PD
XX
XX 29-JAN-1999; 99WO-US02031.
PF
XX
XX 27-AUG-1998; 98US-0141220.
PR
XX 31-JAN-1998; 98US-0073283.
PR
XX 13-FEB-1998; 98US-0074590.
PR
XX 13-FEB-1998; 98US-0074624.
PR
XX 13-FEB-1998; 98US-0074633.
XX
XX (SOSI/) SOSIN H.
XX

```


[illegible]

```

XX  The present sequence represents a nematode extracted anticoagulant
CC protein (NAP). The protein has activity as an anticoagulant and/or serine
CC protease inhibitor. The protein contains at least one NAP domain which
CC has selective inhibitory activity for factor VIIa/TF. The specification
CC describes a method for screening an isolated protein at least one domain
CC for factor VIIa/TF selective inhibitory activity. The method comprises
CC determining the time to clotting effected by a concentration of the
CC isolated protein in an ex vivo prothrombin time (PT) assay and an ex vivo
CC activated partial thromboplastin time (APTT) assay; calculating
CC prolongation of clotting effected by the isolated protein in each of
CC the PT and APTT assay, with respect to a baseline clotting value for
CC each assay, where prolongation of clotting is calculated as fold
CC elevation of clotting time relative to a baseline clotting value, where
CC a doubling of clotting time is deemed a two-fold elevation; and
CC calculating a PT to APTT prolongation ratio, where a ratio at least
CC one is indicative of factor VIIa/TF inhibitory activity. The method is
CC useful for determining if a protein has factor VIIa/TF inhibitory
CC activity.
SQ Sequence 162 AA;

Query Match 21.3%; Score 67; DB 20; Length 162;
Best Local Similarity 29.7%; Pred. No. 2.9;
Matches 19; Conservative 9; Mismatches 20; Indels 16; Gaps 3;

OY 5 HMKGLQSCNSEPDSYRNQACHAR-----CN--LTK-----VEKECEGCELP RP RP 48
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 99 yKgeercknkelsekdeeclelsractgracycndgilyrddfgncvckedcndmelltfpp 158
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
OY 49 RPOH 52
   : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 159 etkh 162

RESULT 10
ID R91711
R91711 standard; Protein; 181 AA.
AC R91711;
XX
XX 17-NOV-1996 (first entry)
DT
XX
XX ACANAP45.
DE
XX
XX ACANAP; HPONAP; NAMNAP; ACENAP; ADUNAP; anticoagulant;
KW nematode-extracted anticoagulant protein; serine protease;
RW nematode; thrombosis; parasitic worm.
XX
XX Ancylostoma caninum.
OS
XX
XX W09612021-A2.
PN
XX
XX 25-APR-1996.
PD
XX
XX 17-OCT-1995; 95WO-US13231.
PE
XX
XX 05-JUN-1995; 95US-0486399.
PR 18-OCT-1994; 94US-0326110.
PR 05-JUN-1995; 95US-0461965.
PR 05-JUN-1995; 95US-0465380.
PR 05-JUN-1995; 95US-0465397.
XX
XX (CORV-) CORVAS INT INC.
PA
XX
XX Bergum PM, Ganssems YGJ, Jespers LS, Laroche YR;
PI Lamweys MJ, Messens JH, Moyle M, Stanssens PH;
PI Vlasuk GP;
XX
XX WPI: 1996-222007/22.
XX
XX N-PSDB; T12957.
XX

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PR 18-OCT-1994; 94US-0326110.
PR 05-JUN-1995; 95US-0461965.
PR 05-JUN-1995; 95US-0465380.
PR 05-JUN-1995; 95US-0486397.
PR 05-JUN-1995; 95US-0486399.
PR 17-OCT-1995; 95MO-US13231.
PA (CORV-) CORVAS INT INC.
XX
XX Berghum PW, Ganssems YGJ, Jespers LS, Laroche YR;
PI Lauwereys MJ, Messens JHL, Moyle M, Stanssens PEH;
PI Vlausk GP;
XX
XX WPI; 1999-539569/45.
XX
XX Screening an isolated protein for Nematode-extracted Anticoagulant
PT Protein domains
XX
XX Disclosure; Columns 139-140; 197pp; English.
XX
XX The present sequence represents a nematode extracted anticoagulant
CC protein (NAP). The protein has activity as an anticoagulant and/or serine
CC protease inhibitor. The protein contains at least one NAP domain which
CC has selective inhibitory activity for factor VIIa/TF. The specification
CC describes a method for screening an isolated protein at least one domain
CC for factor VIIa/TF selective inhibitory activity. The method comprises
CC determining the time to clotting effected by a concentration of the
CC isolated protein in an ex vivo prothrombin time (PT) assay and an ex vivo
CC activated partial thromboplastin time (APTT) assay; calculating
CC prolongation of clotting effected by the isolated protein in each of
CC the PT and APTT assay, with respect to a baseline clotting value for
CC each assay, where prolongation of clotting is calculated as fold
CC elevation of clotting time relative to a baseline clotting value, where
CC a doubling of clotting time is deemed a two-fold elevation; and
CC calculating a PT to APTT prolongation ratio, where a ratio at least
CC one is indicative of factor VIIa/TF inhibitory activity. The method is
CC useful for determining if a protein has factor VIIa/TF inhibitory
CC activity.
XX
XX Sequence 78 AA;
SQ
Query Match 20.3%; Score 64; DB 20; Length 78;
Best Local Similarity 28.1%; Pred. No. 2.9;
Matches 18; Conservative 10; Mismatches 20; Indels 16; Gaps 3;
QY 5 HNKCLQSCNSRDSYRNQACHAR-----CN--LLK-----VEKECEEGEIPRRP 48
Db 15 ykqgerkcselisekneaeactractgracvcndglyrdfigncvexdecndmeilftpp 74
QY 49 RPOH 52
Db 75 etkh 78
DE Mature nematode extracted anticoagulant protein ACANAP47.
XX
XX Nematode extracted anticoagulant protein; NAP; anticoagulant;
KW serine protease inhibitor; NAP domain; factor VIIa/TF.
XX
XX Ancyllostoma caninum.
OS
XX
XX US5955294-A.
PN
XX
XX 21-SEP-1999.
PD

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XX
XX 19-APR-1996; 96US-0634641.
XX
XX 18-OCT-1994; 94US-0326110.
XX
XX 18-OCT-1994; 94US-0461965.
XX
XX 05-JUN-1995; 95US-0465380.
XX
XX 05-JUN-1995; 95US-0486397.
XX
XX 05-JUN-1995; 95US-0486399.
XX
XX 17-OCT-1995; 95MO-US13231.
PA (CORV-) CORVAS INT INC.
XX
XX Berghum PW, Ganssems YGJ, Jespers LS, Laroche YR;
PI Lauwereys MJ, Messens JHL, Moyle M, Stanssens PEH;
PI Vlausk GP;
XX
XX WPI; 1999-539569/45.
XX
XX Screening an isolated protein for Nematode-extracted Anticoagulant
PT Protein domains
XX
XX Disclosure; Fig 19; 197pp; English.
XX
XX The present sequence represents a nematode extracted anticoagulant
CC protein (NAP). The protein has activity as an anticoagulant and/or serine
CC protease inhibitor. The protein contains at least one NAP domain which
CC has selective inhibitory activity for factor VIIa/TF. The specification
CC describes a method for screening an isolated protein at least one domain
CC for factor VIIa/TF selective inhibitory activity. The method comprises
CC determining the time to clotting effected by a concentration of the
CC isolated protein in an ex vivo prothrombin time (PT) assay and an ex vivo
CC activated partial thromboplastin time (APTT) assay; calculating
CC prolongation of clotting effected by the isolated protein in each of
CC the PT and APTT assay, with respect to a baseline clotting value for
CC each assay, where prolongation of clotting is calculated as fold
CC elevation of clotting time relative to a baseline clotting value, where
CC a doubling of clotting time is deemed a two-fold elevation; and
CC calculating a PT to APTT prolongation ratio, where a ratio at least
CC one is indicative of factor VIIa/TF inhibitory activity. The method is
CC useful for determining if a protein has factor VIIa/TF inhibitory
CC activity.
XX
XX Sequence 162 AA;
SQ
Query Match 20.3%; Score 64; DB 20; Length 162;
Best Local Similarity 28.1%; Pred. No. 6.1;
Matches 18; Conservative 10; Mismatches 20; Indels 16; Gaps 3;
QY 5 HNKCLQSCNSRDSYRNQACHAR-----CN--LLK-----VEKECEEGEIPRRP 48
Db 99 ykqgerkcselisekneaeactractgracvcndglyrdfigncvexdecndmeilftpp 158
QY 49 RPOH 52
Db 159 etkh 162
DE Mature nematode extracted anticoagulant protein ACANAP47.
XX
XX 17-NOV-1996 (first entry)
XX
XX ACANAP47.
OS
XX
XX ACANAP; HPONAP; NAMNAP; ACENAP; ADUNAP; anticoagulant;
KW nematode-extracted anticoagulant protein; serine protease;
KW nematode; thrombosis; parasitic worm.
XX

```

OS	Ancylostoma caninum.
XX	
PM	- W09612021 -A2.
XX	
PD	25-APR-1996.
XX	
PF	17-OCT-1995; 95WO-US13231.
XX	
PR	05-JUN-1995; 95US-0486399.
PR	18-OCT-1994; 94US-0326110.
PR	05-JUN-1995; 95US-0461965.
PR	05-JUN-1995; 95US-0465380.
PR	05-JUN-1995; 95US-0486397.
XX	
PA	(CORV-) CORVAS INT INC.
XX	
P1	Bergum PW, Ganssema YGJ, Jespers LS, Laroche YR;
XI	Laureweys MJ, Messens JHl, Moyle M, Stanssens PEH,
P1	Vlasuk GP:
XX	
DR	WPI: 1996-222007/22.
N-PDB:	T12958.
PT	Proteins with anticoagulant and/or serine protease inhibitory activity - isolated from nematodes and useful to inhibit blood coagulation
PS	Claim 221; Fig 13G; 243pp; English.
CC	Proteins with anticoagulant and/or serine protease inhibitory activity, isolated from nematodes, are useful to inhibit blood coagulation. The proteins can be added to blood collection tubes defining the collection of mammalian plasma. They are also useful to prevent or inhibit thrombosis, and may be given alone or in combination with other therapeutic or in vivo diagnostic agents. The proteins can serve as immunogens to raise antibodies for use in the diagnosis and identification of NAP concn. Levels in biological fluids, e.g. to detect mammalian infection with a parasitic worm. They can also be used as immunogens in prophylactic and therapeutic vaccines against parasitic worm infection. The proteins may double the clotting time of human plasma in prothrombin time assays when present at 10-50 nMol/l and double the clotting time of human plasma in activated partial thrombin time assays when present at 10-100 nMol/l.
CC	The anticoagulant proteins are pref. derived from Ancylostoma caninum, A. ceylanicum, A. duodenale, Necator americanus or Heligmosomoides polygyrus.
CC	The proteins pref. have 2 NAP domains and specifically inhibit the catalytic activity of the factor VIIa/TF complex in the presence of factor Xa or a catalytically inactive factor Xa deriv., do not specifically inhibit the activation of factor VIIIa in the absence of TF and do not specifically inhibit prothrombinase.
SQ	Sequence 181 AA:
Query Match	20.3%; Score 64; DB 17; Length 181;
Best Local Similarity	28.1%; Pred. No. 6.9;
Matches 18; Conservative 10; Mismatches 20; Indels 16; Gaps	
OY	5 HNKCLQSCNSFSDSRNQCCHAR-----CN--LLK-----VEKECEGEIPRP 48 ::: Db 118 ykgerckseeisekeaneacistractgracycndgjlyrdffgnvcekdcmdmeltfpp 177 OY 49 RPOH 52 ::: Db 178 etkh 181
RESULT 15	
Y30410	
ID	Y30410 standard; Protein; 181 AA.
XX	

AC		Y30410.	
XX	DT	15-NOV-1999	(first entry)
DE		Nematode extracted anticoagulant protein AcanAP45.	
KW		Nematode extracted anticoagulant protein; NMP: anticoagulant;	
XX		serine protease inhibitor; NAP,domain; factor VIIA/TF.	
OS		Ancylostoma caninum.	
PN		US9595294-A.	
PD		21-SEP-1999.	
PF		19-APR-1996;	96US-0634641.
PR		19-APR-1996;	96US-0634641.
PR		18-OCT-1994;	94US-0326110.
PR		05-JUN-1995;	95US-0461965.
PR		05-JUN-1995;	95US-0465380.
PR		05-JUN-1995;	95US-0486397.
PR		05-JUN-1995;	95US-0486399.
PA		17-OCT-1995;	95WO-USJ3231.
PI		(CORV-) CORVAS INT INC.	
PL	Bergum PM,	Gensemans YGJ,	Jaspers LS, Laroche YR;
PI	Lauwereys MJ,	Messens JHL,	Moyle M, Stanssens PH;
PI	Vlasuk GP:		
DR	NPf: 1999-	539569/45.	
NN	N-Psdb:	Z10458.	
PT		Screening an isolated protein for Nematode-extracted Anticoagulant	
PS		protein domains	
XX		Example 12: Fig 13g; 197pp: English.	
CC		The present sequence represents a nematode extracted anticoagulant	
CC		protein (NMP). The protein has activity as an anticoagulant and/or serine	
CC		protease inhibitor. The protein contains at least one NAP domain which	
CC		has selective inhibitory activity for factor VIIa/TF. The specification	
CC		describes a method for screening an isolated protein at least one domain	
CC		for factor VIIa/TF selective inhibitory activity. The method comprises	
CC		determining the time to clotting effected by a concentration of the	
CC		isolated protein in an ex vivo prothrombin time (PT) assay and an ex vivo	
CC		activated partial thromoplastin time (aPTT) assay; calculating	
CC		prolongation of clotting effected by the isolated protein in each of	
CC		the PT and aPTT assay, with respect to a baseline clotting value for	
CC		each assay, where prolongation of clotting is calculated as fold	
CC		elevation of clotting time relative to a baseline clotting value, where	
CC		a doubling of clotting time is deemed a two-fold elevation; and	
CC		calculating a PT to aPTT prolongation ratio, where a ratio at least	
CC		one is indicative of factor VIIa/TF inhibitory activity. The method is	
CC		useful for determining if a protein has factor VIIa/TF inhibitory	
CC		activity.	
SQ	Sequence	181 AA:	
OY	Query Match	20.3%; Score 64; DB 20; Length 181;	
DZ	Best Local Similarity	28.1%; Pred. No. 6.9;	
DB	Matches	18; Conservative 10; Mismatches 20; Indels 16; Gaps 3	
OY	5 ENKCLQCNSNDSTRNQACHAR-----CN--LLK-----VEKECEGEIIPRRP	48	
OY	: : : : : :	:	
OY	118 ykqcerckseelsekneeciastractgracvcdnglyddfgncvekcdecndmeilltfpp	177	
DB	: : :	:	
DB	49 RPOH 52		
DB	: :	:	
DB	178 etkh 181		

Search completed: March 1, 2001, 16:09:37
Job time: 1329 sec
